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# Common Management Services

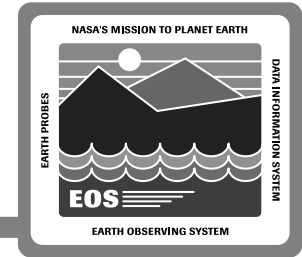
## Alan Gary

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19 January 1995

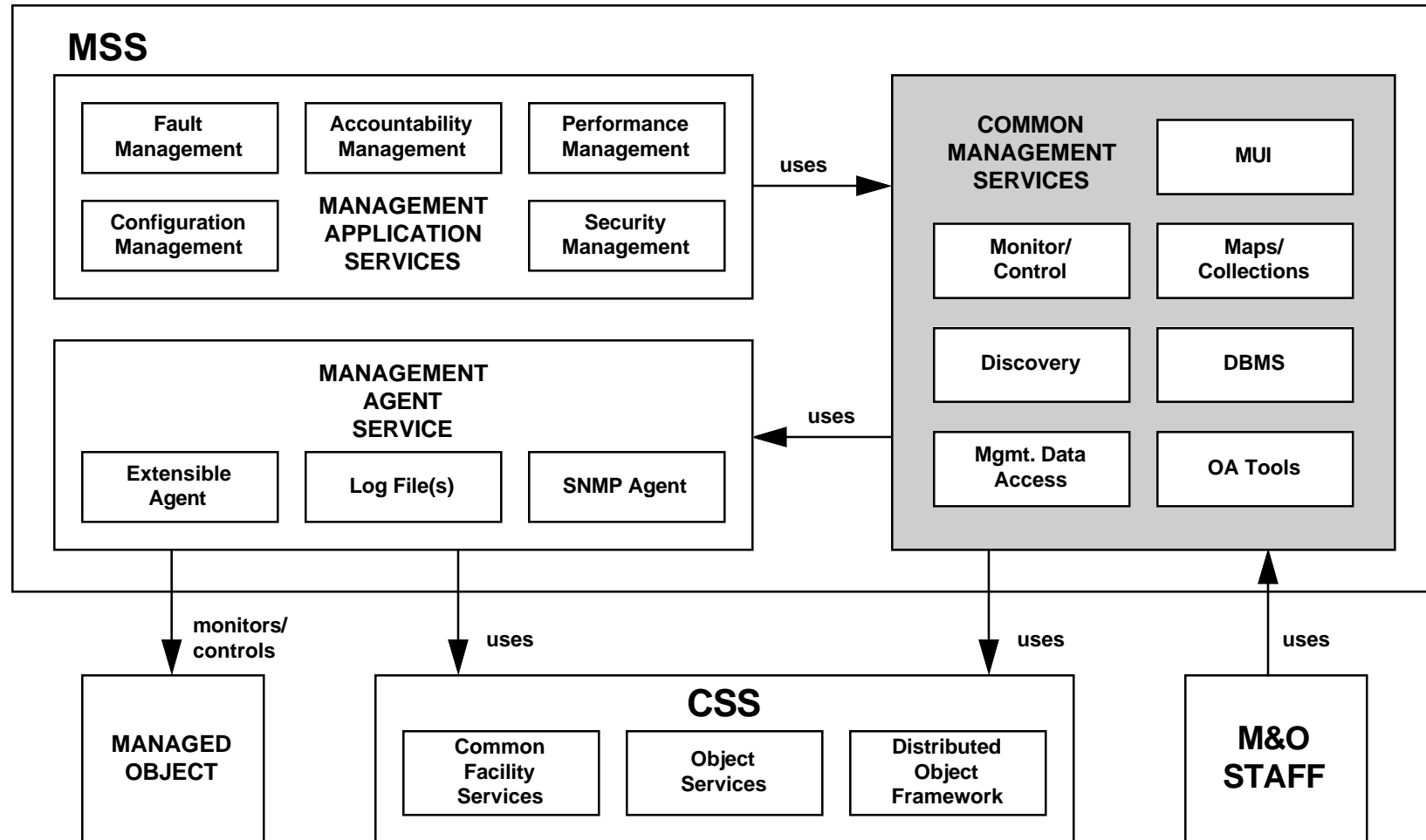
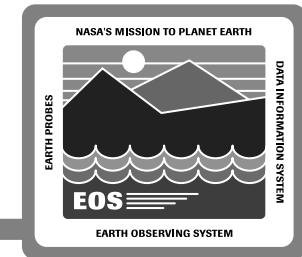
# Common Management Services Roadmap

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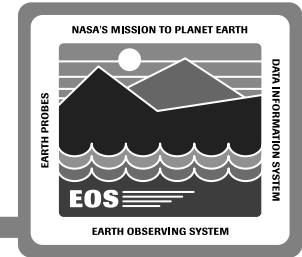


- **Release Capabilities**
- **Management Framework**
  - **Management User Interface (MUI)**
  - **Maps/Collection**
  - **Monitor/Control**
  - **Discovery**
- **Management Data Access**
- **DataBase Management System (DBMS)**
- **Summary**

# MSS Subsystem Design



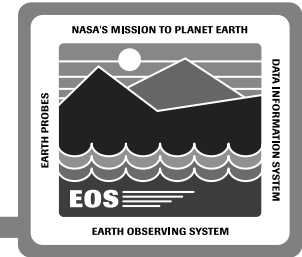
# Common Management Services Release Capabilities



IR-1	Release A
<ul style="list-style-type: none"><li>• <b>System Management</b><ul style="list-style-type: none"><li>- <b>collect performance statistics</b></li><li>- <b>Ad Hoc reporting</b></li><li>- <b>logging system events</b></li></ul></li><li>• <b>Network Management</b><ul style="list-style-type: none"><li>- <b>logging network events</b></li><li>- <b>monitor network devices</b></li><li>- <b>display network status</b></li></ul></li></ul>	<ul style="list-style-type: none"><li>• <b>System Management</b><ul style="list-style-type: none"><li>- <i>collect performance statistics</i></li><li>- <i>Ad Hoc reporting</i></li><li>- <b>logging system events (enhanced)</b></li><li>- <b>collect audit information</b></li><li>- <b>monitor applications</b></li><li>- <b>monitor algorithms</b></li><li>- <b>monitor ECS Hosts</b></li><li>- <b>display system status</b></li></ul></li><li>• <b>Network Management</b><ul style="list-style-type: none"><li>- <i>logging network events</i></li><li>- <i>monitor network devices</i></li><li>- <i>display network status</i></li></ul></li></ul>

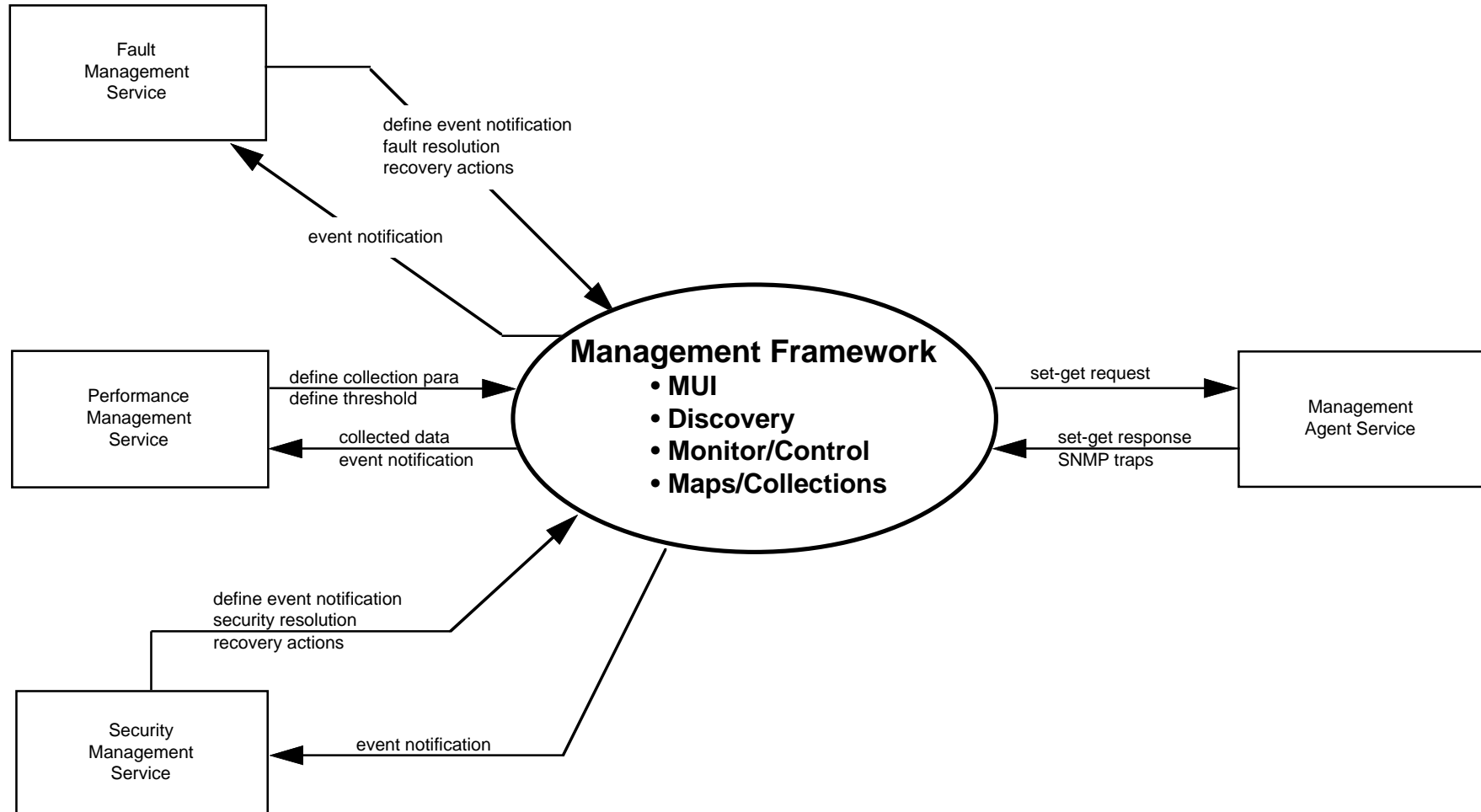
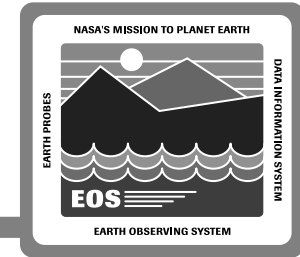
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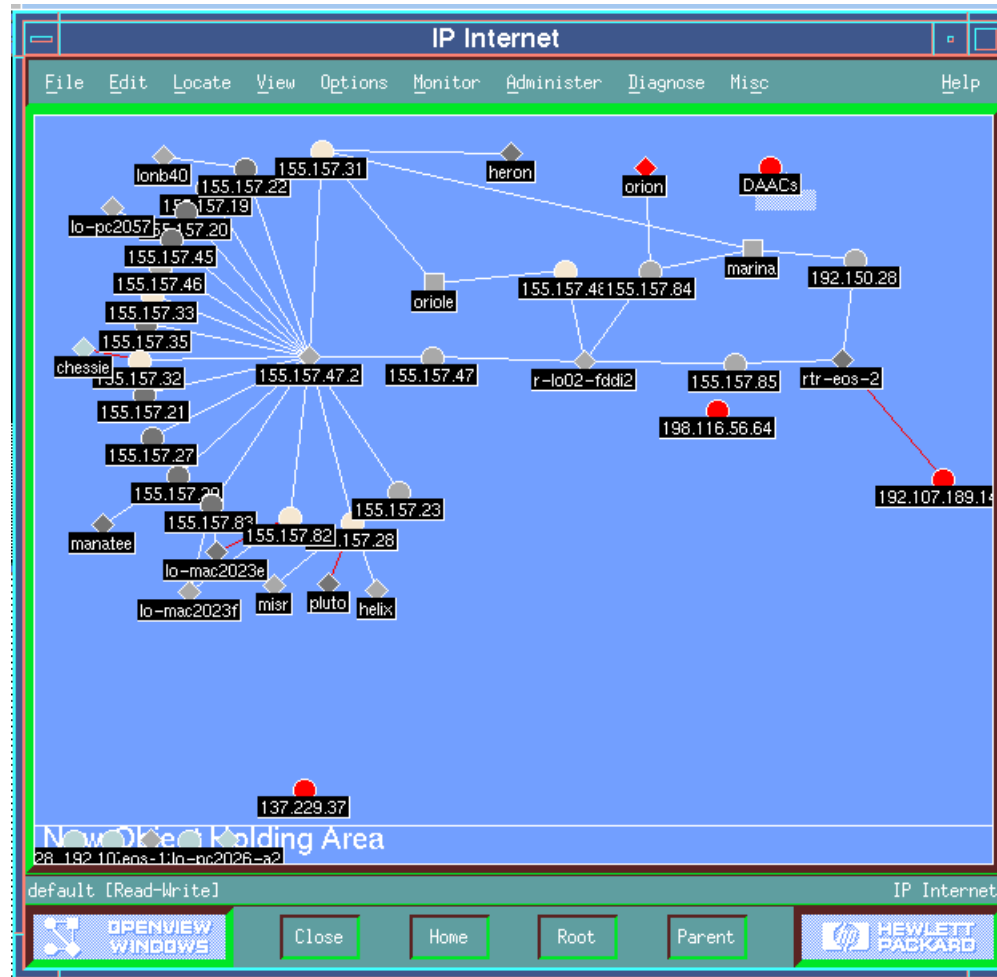
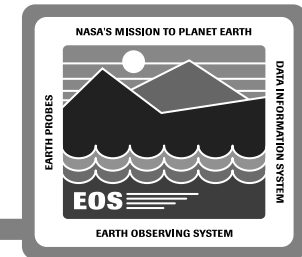


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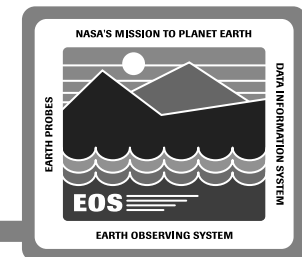
# Management Framework Context



# Management Framework Maps & Symbols

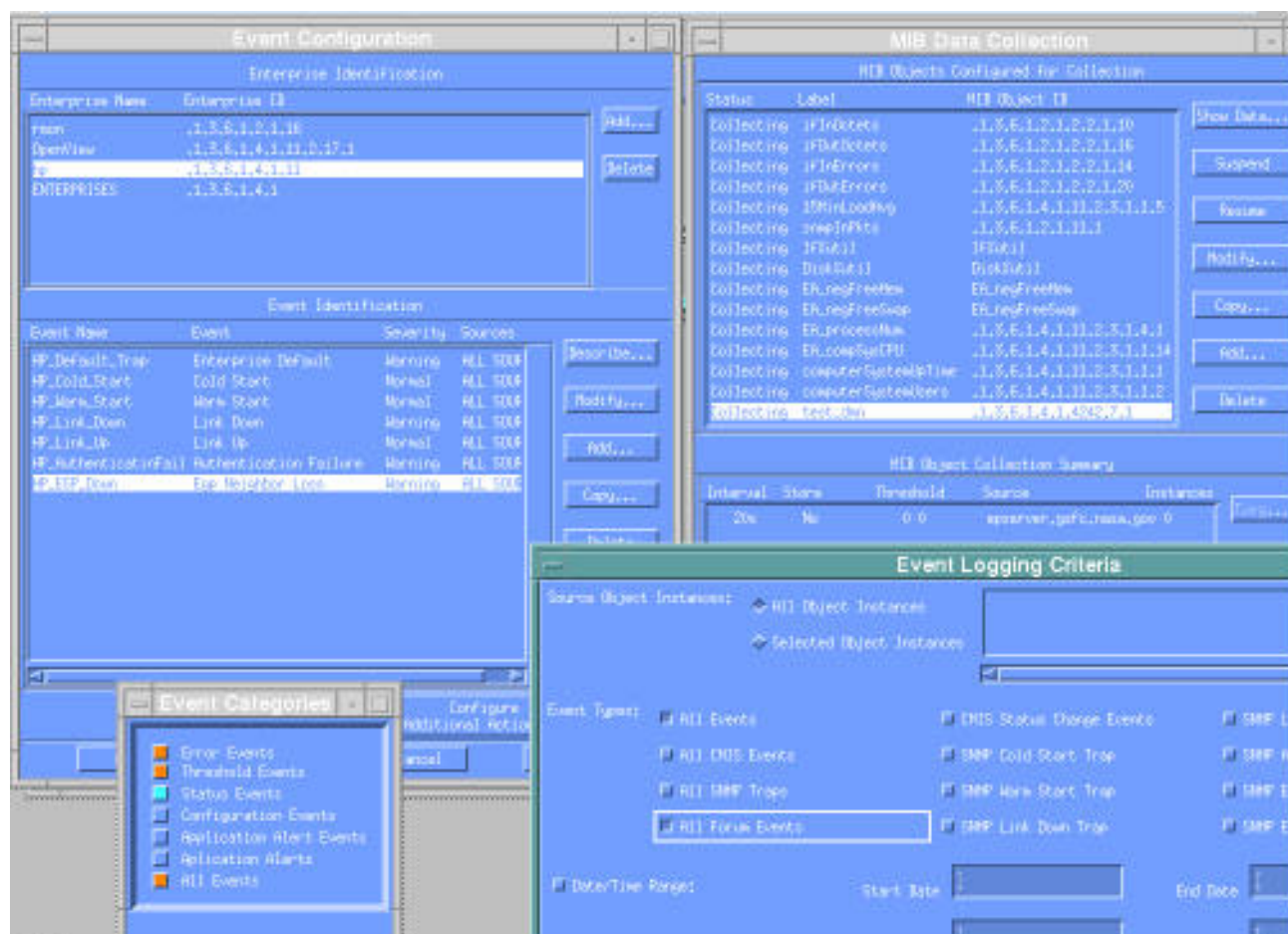
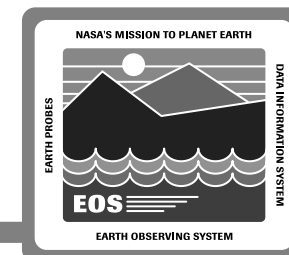


# Management Framework Hierarchical Relationship

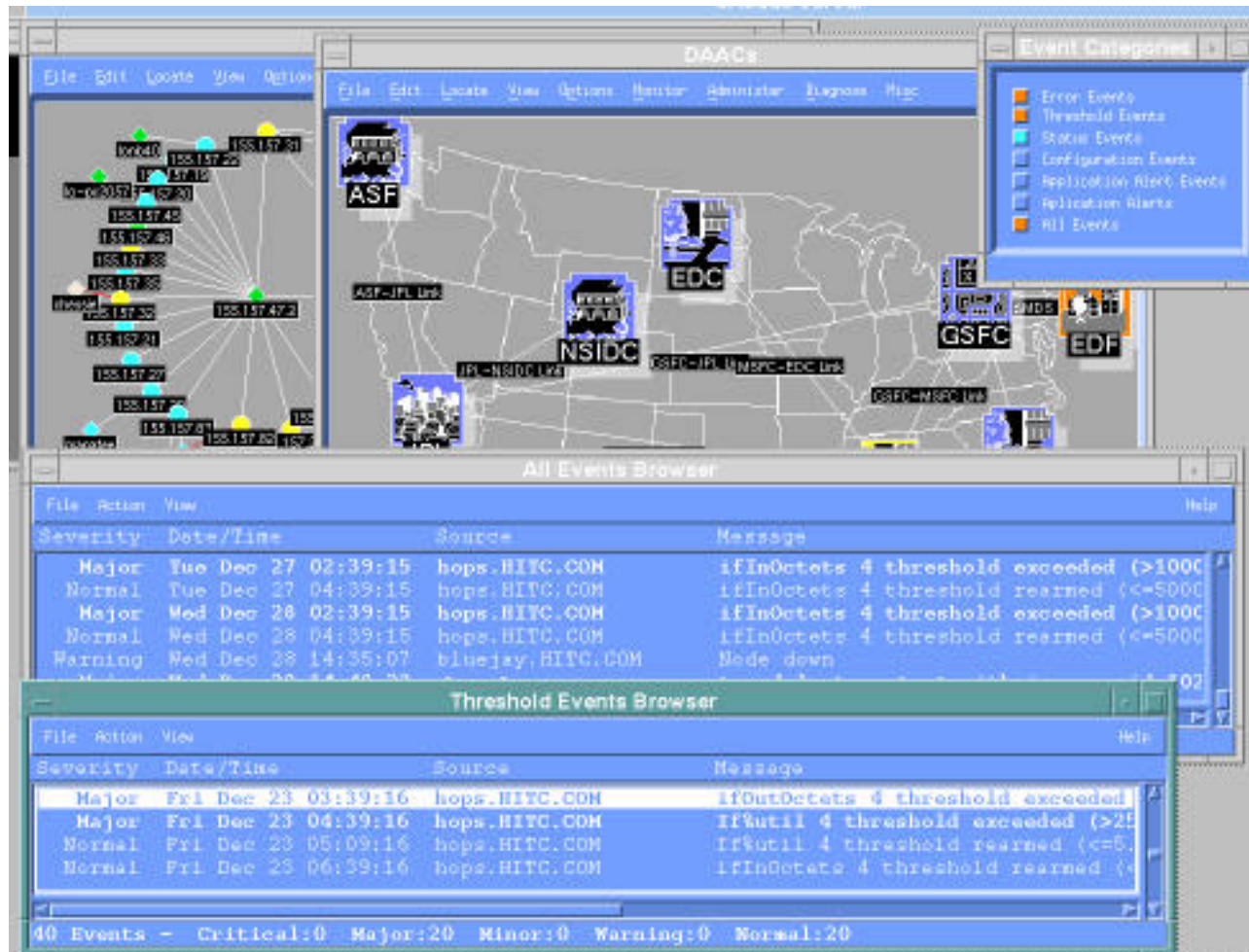
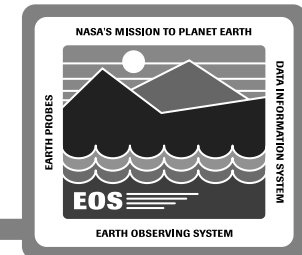




# Management Framework Configuration

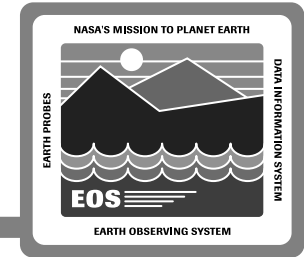


# Management Framework Event Browser



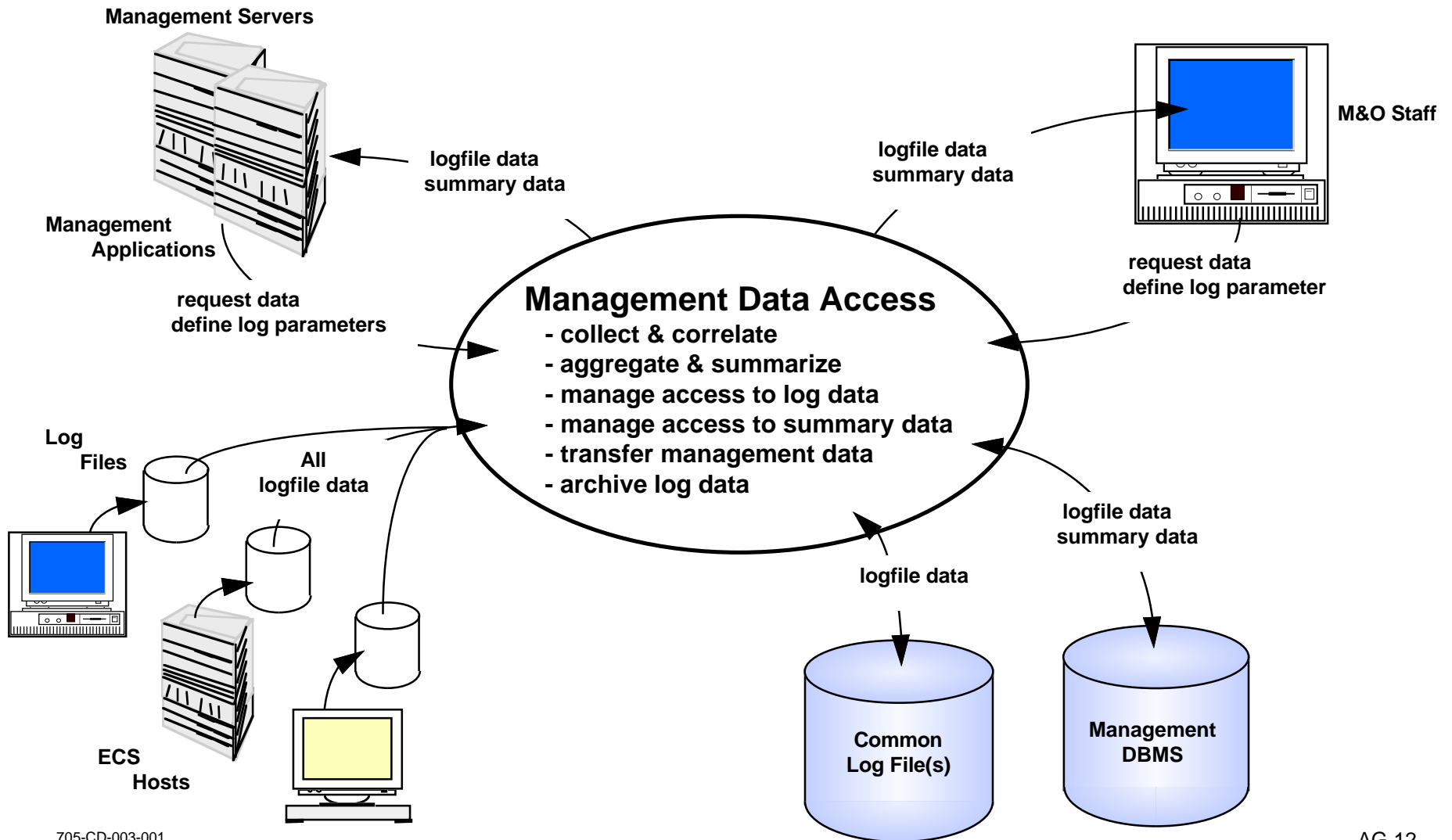
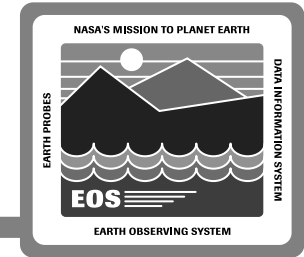
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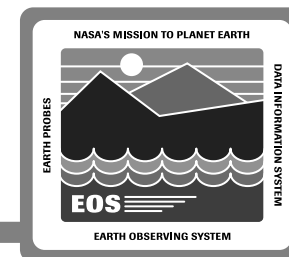


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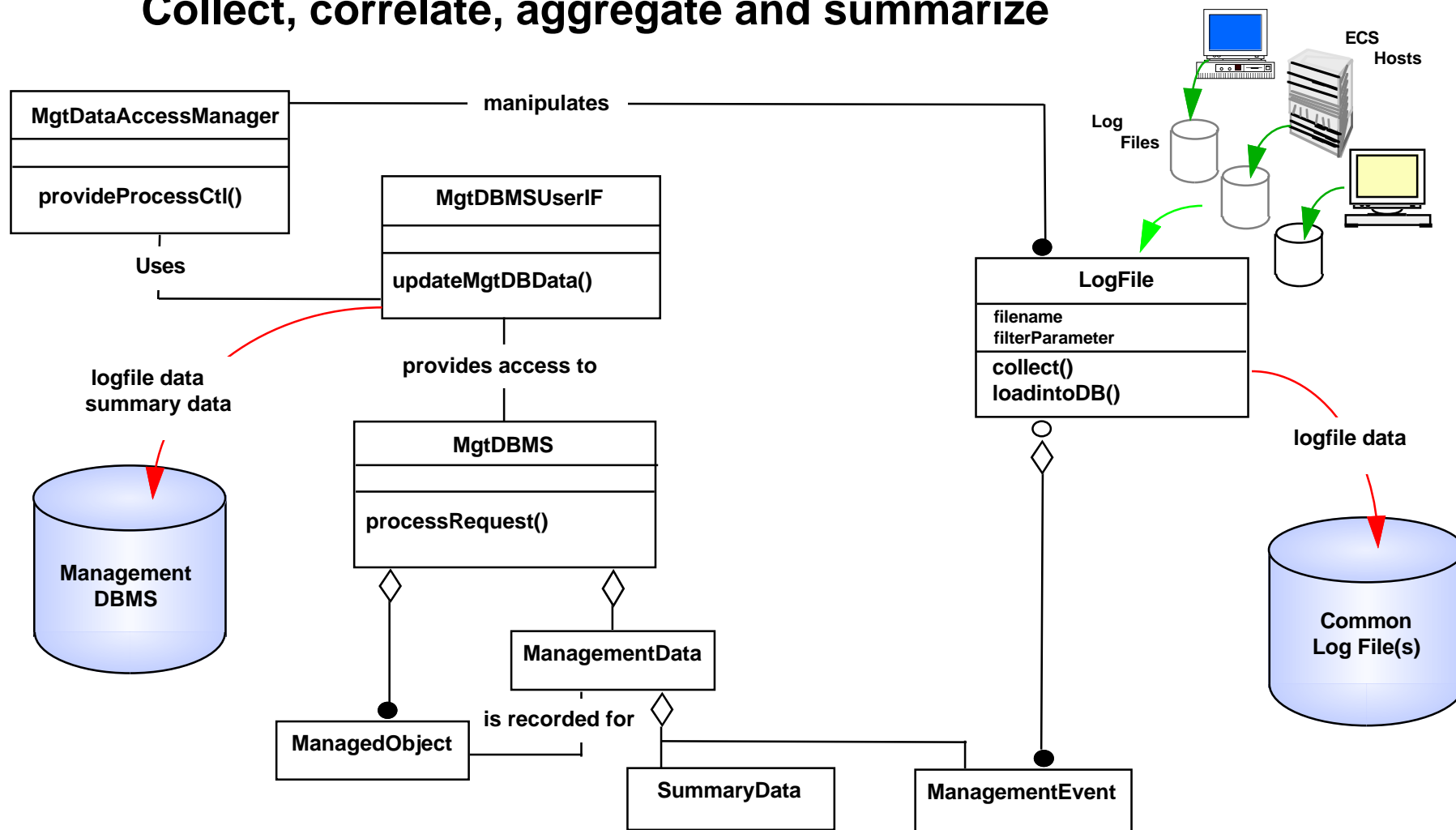
# Management Data Access Context



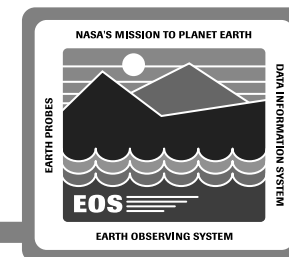
# Management Data Access Design Decomposition (part 1)



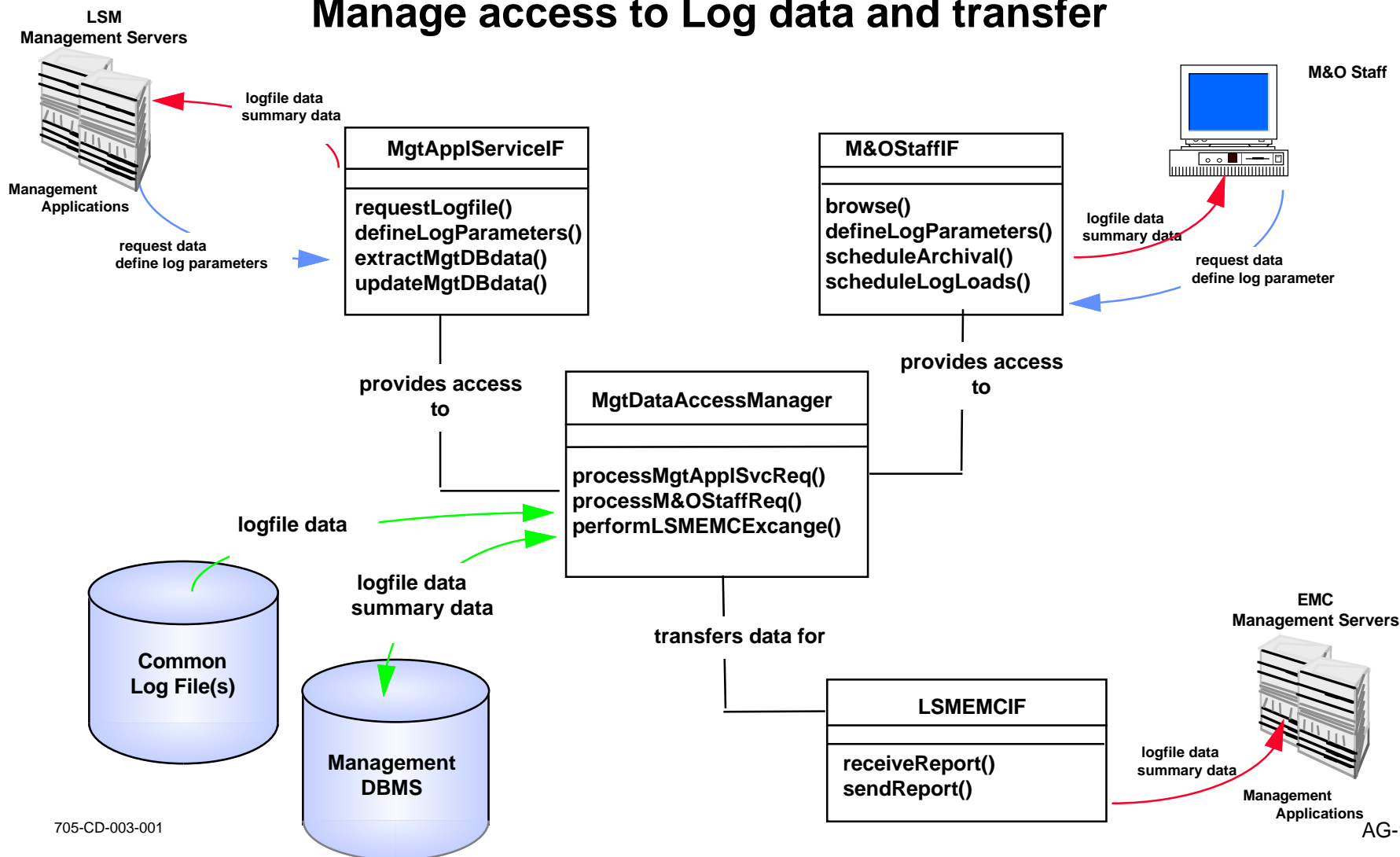
Collect, correlate, aggregate and summarize



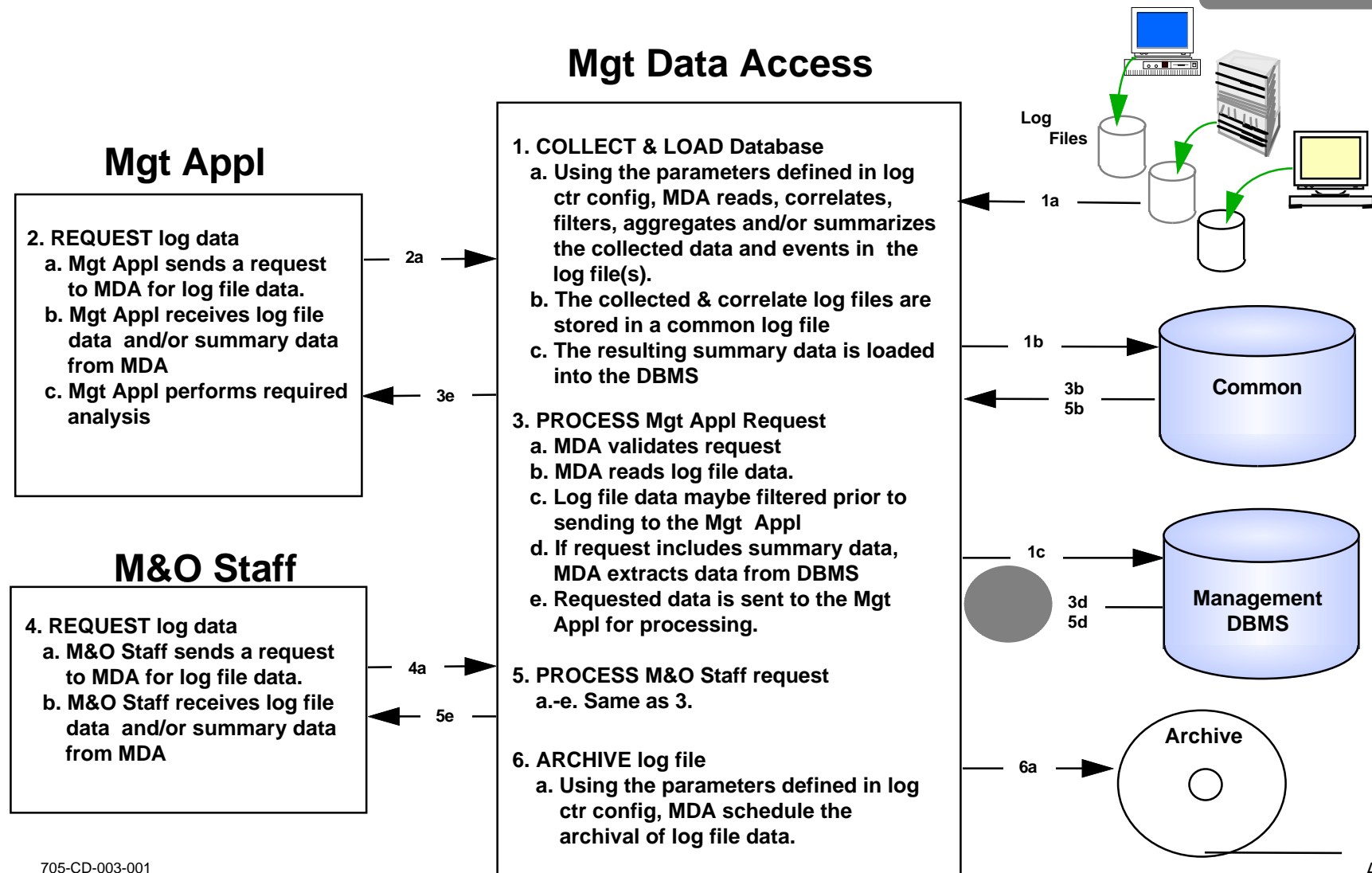
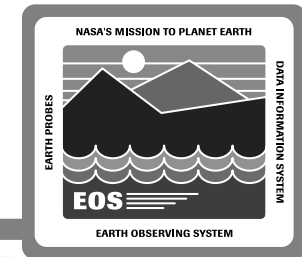
# Management Data Access Design Decomposition (part 2)



## Manage access to Log data and transfer

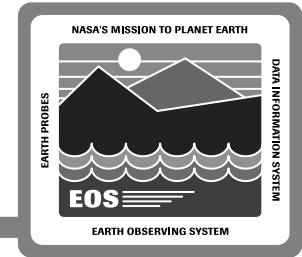


# Management Data Access Scenario



# Common Management Services Roadmap

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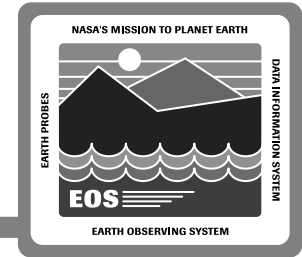


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# Management DBMS

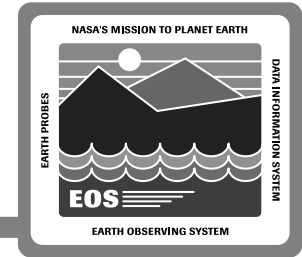
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## Database Management System supports

- Import of log file data
- Query and browse capability
- Generate summaries, aggregations, and statistics
- Trend analysis, correlation, and planning
- Report generation
  - standard predefined and preformatted output
  - ad hoc reporting

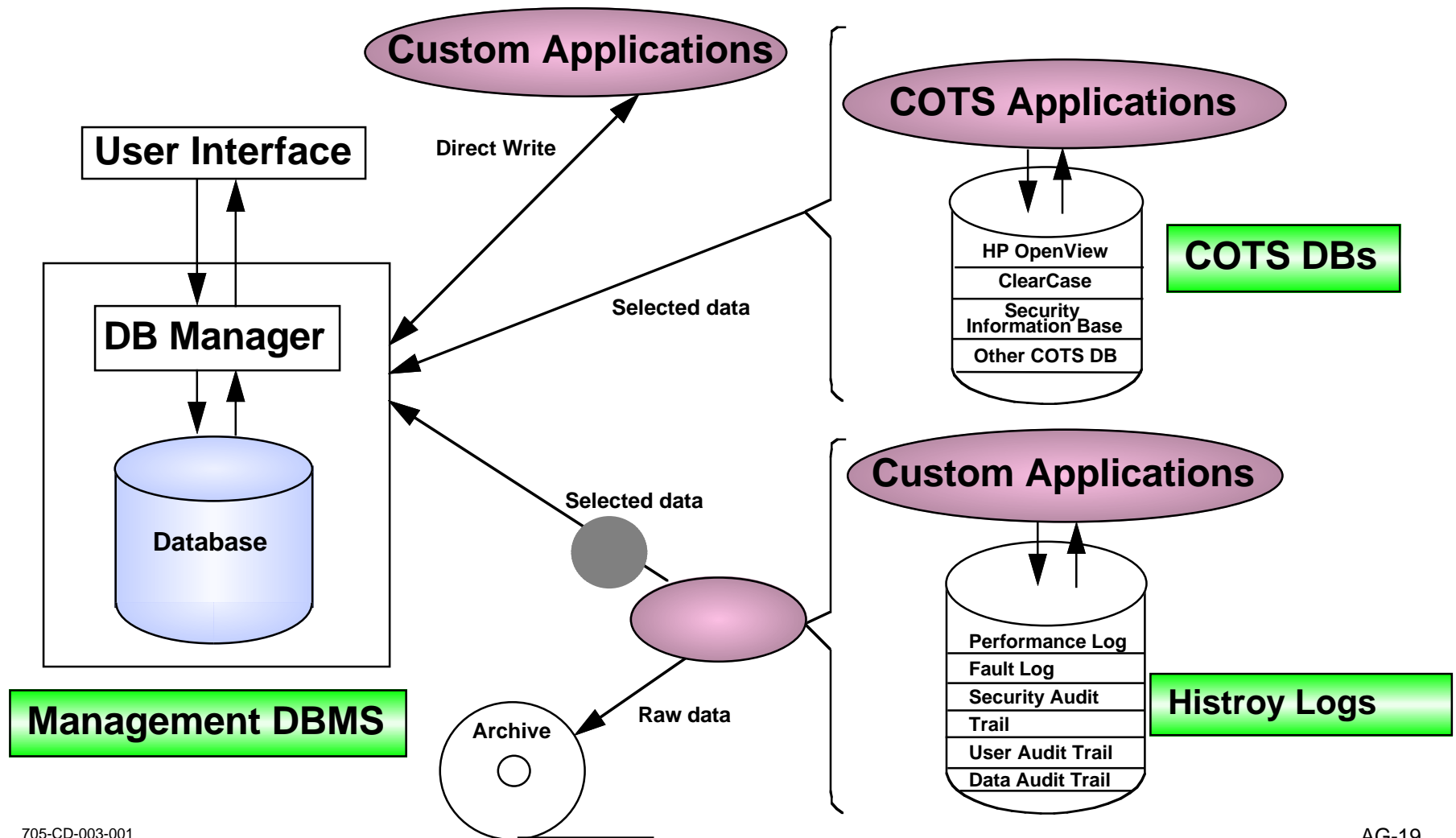
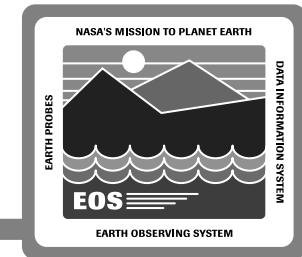
# Management Data at Sites



## Three major types of data stores:

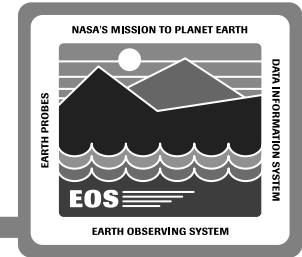
- **Log files**
  - Flat files (e.g. history log) containing large volume of raw data collected by COTS and/or MSS managed applications
- **COTS proprietary data stores, e.g. HP-OpenView, ClearCase**
  - accessed via a COTS API
  - data export
- **Management DBMS data stores**
  - selected log file data
  - aggregated and summarized log file data
  - ECS custom applications maintained data, e.g. SW CM-Baseline Mgmt

# Management Data at Sites (cont.)



# Management Data at SMC

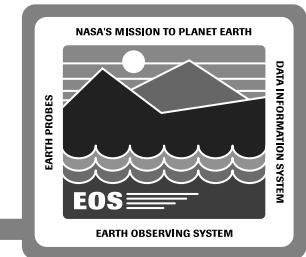
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## Management data provided to SMC

- Selected log file data
- Summary data
- Remote access to LSM management DBMS
- Hardcopy reports

# Common Management Services Summary



Service	Key Technology Selection	Migration and Evolution
Management Framework	<ul style="list-style-type: none"><li>- SNMP based Framework</li><li>- OSF/OMG standards based</li><li>- HP-OpenView selected</li></ul>	<ul style="list-style-type: none"><li>- SNMPv2</li><li>- CMIP</li><li>- RMON</li><li>- CORBA</li></ul>
Management Data Access	<ul style="list-style-type: none"><li>- DCE RPCs</li></ul>	<ul style="list-style-type: none"><li>- OODCE</li></ul>
Management Database	<ul style="list-style-type: none"><li>- Relational DBMS</li></ul>	